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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,824	07/23/2003	Nelson L. Chang	200206547-1	7781

22879 7590 02/26/2007  
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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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CHUNG, EUN HEE

ART UNIT	PAPER NUMBER
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2123

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/625,824

Applicant(s)

CHANG ET AL.

Examiner

Eun H. Chung

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendment filed 12/27/2006 has been received and considered. Claims 1-36 are presented for examination.

### Response to Applicant's Remarks & Examiner's Withdrawals

2. Examiner respectfully withdraws the rejection over *35 USC § 112* in view of the amendment and/or applicant's arguments.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimabara (US Patent No. 6,360,168).

Shimabara teaches (Claims 1, 26, and 35) a method, computer-readable medium, apparatus (Fig. 1) for enabling a three-dimensional simulation through a region (Col. 1 lines 49-52, Col. 7 lines 20-60), comprising:

obtaining information about a path traversed by a user through a region, including a plurality of locations on said path (Col. 8 lines 1-8);

acquiring content associated with at least some of said locations (Fig. 3-7, Col. 5 lines 1-15, Col. 6 lines 49-67, Col. 7 lines 1-8);

correlating said locations with said content (Fig. 1-7, Col. 4 lines 39-67); and  
enabling an interactive three-dimensional simulation through said region as experienced  
from a moving vantage point along a simulation route (Col. 7 lines 20-59), including:  
accessing a three-dimensional map for at least a portion of said region (Fig. 9);  
and  
associating said acquired content to locations on said three-dimensional map  
based on said correlation (Col. 7 lines 10-59);  
(Claims 4 and 29) where said simulation route is at least partially automatically generated  
(Col. 8 lines 1-8);  
(Claims 6 and 30) where said content represents synthetic content (Col. 8 lines 9-36);  
(Claim 7) organizing said content in an electronic file by classifications thereof (Fig. 1-  
7);  
(Claim 8) where said obtaining information about said path includes capturing orientation  
information along said traversed path (Fig. 1 GPS receiver 5, Col. 3 lines 58-67).

Shimabara teaches (Claims 9, 31, and 36) a method, a computer-readable medium, and  
apparatus (Fig. 1) for simulating a trip through a region, from a three-dimensional vantage point  
(Col. 1 lines 49-52, Col. 2 lines 39-54, Col. 7 lines 20-60), comprising:

accessing information about a path traversed through a region, including a plurality of  
predetermined locations (Fig. 1-8, Col. 8 lines 1-8);

accessing content associated with at least some of said locations (Fig. 1-7, Col. 4 lines  
39-67, Col. 5 lines 1-15, Col. 6 lines 49-67, Col. 7 lines 1-8);

accessing a three-dimensional map of said region (Fig. 9);  
associating at least some of said content, and at least some of said locations, with said map (Col. 7 lines 10-59);

determining a simulation route through said region (Col. 8 lines 1-8); and  
displaying to a user an interactive simulation along said simulation route, including presenting content along said simulation route, as experienced from a moving vantage point (Col. 2 lines 39-67, Col. 4 lines 1-4, Col. 7 lines 50-59, Col. 9 lines 42-62 );

(Claim 10) presenting at least some of said content at least partially off of said path (Col. 2 lines 39-54, Col. 4 lines 53-60);

(Claim 13) where: (i) said simulation route substantially tracks said traversed path (Col. 7 lines 60-67, Col. 8 lines 1-8); and (ii) said moving vantage point follows said traversed path (Col. 2 lines 43-54);

(Claim 15) specifying at least a portion of said simulation route in accordance with local terrain features (Col. 2 lines 39-54, Col. 4 lines 53-60);

(Claims 19 and 33) executing at least one automated process for performing a user-specified interactive simulation aspect that would otherwise be inconvenient for the user to implement manually (Col. 8 lines 1-8);

(Claim 23) accessing information about multiple paths for use in said simulation (Col. 7 lines 65-67, Col. 8 lines 1-8).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 2, 3, and 20, 21, 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of Simpson et al. (US Patent No. 5,999,882).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara teaches (Claim 21) automatically generating a simulation route related to said traversed path (Col. 8 lines 1-8).

Shimabara fails to teach (Claims 2, 21, and 27) where said simulation route is different than said traversed path;

(Claims 3 and 28) where said simulation route is at least partially user-specifiable;

(Claim 20) accepting a user command to override a portion of the automated process.

Simpson et al. teaches (Claims 2, 21, and 27) where said simulation route is different than said traversed path (Fig. 4, Col. 6 lines 32-42, col. 7 lines 5-6);

(Claims 3 and 28) where said simulation route is at least partially user-specifiable (Fig. 4, Col. 8 lines 46-67);

(Claim 20) accepting a user command to override a portion of the automated process (Fig. 4).

Shimabara and Simpson et al. are analogous art because they are both related to a method of providing a travel route.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include the simulation route and user command of Simpson et al., with the method of a creating image of traveling path of Shimabara et al. because Simpson et al.

teaches advantages of the system that includes providing a user interface with which a client may intuitively enter the travel route or select a location (Col. 2 lines 31-42).

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of DeLorme et al. (US Patent No. 5,948,040).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara fails to teach (i) at least some of said locations are known as a function of time; (ii) at least some of said content is identifiable by its time of acquisition; and (iii) said associating includes using said times in (i) and (ii) to determine locations on said map where said content should be associated.

DeLorme et al. teaches (i) at least some of said locations are known as a function of time (Fig. 8, Col. 67 lines 29-67, col. 68 lines 1-6); (ii) at least some of said content is identifiable by its time of acquisition (Fig. 8, Col. 67 lines 29-67, col. 68 lines 1-6); and (iii) said associating includes using said times in (i) and (ii) to determine locations on said map where said content should be associated (Fig. 8, Col. 67 lines 29-67, col. 68 lines 1-6).

Shimabara and DeLorme et al. are analogous art because they are both related to a method of generating a travel route.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include time frame of DeLorme et al., with the method of a creating image of traveling path of Shimabara et al. because DeLorme et al. provides flexible, selective



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input for a great variety of simple or complex sequential travel planning inquiries (Col. 10 lines 59-63).

10. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of Miyamoto et al. (US Patent No. 6,139,433).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara teaches (Claims 11 and 8) displaying at least some of said content (Col. 2 lines 39-67, Col. 4 lines 1-4, Col. 7 lines 50-59, Col. 9 lines 42-62).

Shimabara fails to teach (Claim 11) a rotating image and (Claim 18) pausing.

Blanton et al. teaches (Claim 11) a rotating image (4A-4F, Col.12 lines 60-64) and (Claim 18) pausing (Col. 30 lines 23-47).

Shimabara and Blanton et al. are analogous art because they are both related to a method of providing an image.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include rotating and pausing image of Blanton et al., with the method of a creating image of traveling path of Shimabara et al. because rotating and pausing image are well known process in a method for displaying images, and Blanton et al. teaches advantages of system that automatically changes the apparent moving direction of the camera or modifies the apparent camera angle and utilizing the ability to switch three-dimensional display perspectives(Col. 3lines 1-49).

11. Claims 12, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of Dunn et al. (US Pub. No. 2004/0061726).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara teaches (Claim 12) said off-path content (Col. 2 lines 39-54, Col. 4 lines 53-60), (Claim 16) content items (Fig. 3-6), and (Claim 17) defining said moving vantage point (Col. 2 lines 43-54, Col. 14 lines 3-29).

Shimabara fails to teach (Claim 12) suspending presentation based on its proximity and field-of-view relative to said user, (Claim 16) presenting more detailed information, and (Claim 17) said user's selection of at least one item of content.

Dunn et al. teaches (Claim 12) suspending presentation based on its proximity and field-of-view relative to said user (Fig. 2, Paragraph [0062]), (Claim 16) presenting more detailed information (Fig. 2, Paragraph [0062]), and (Claim 17) said user's selection of at least one item of content (Fig. 2, Paragraph [0062]).

Shimabara and Dunn et al. are analogous art because they are both related to a method of generating an image.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include suspending display, presenting more detailed information and user's selection function of Dunn et al., with the method of a creating image of traveling path of Shimabara et al. to establish the limitation as recited in claims 12, 16, and 17 because Dunn et al. teaches advantages of system that includes accurate and rapid visualization of a wide area and increase flexibility (Paragraph [0039]-[0053]).

12. Claims 14 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of Gia (US Pub. No. 2001/0023390).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara fails to teach modifying at least a portion of said simulation route to avoid collision with at least some of said content during said simulation.

Gia teaches modifying at least a portion of said simulation route to avoid collision with at least some of said content during said simulation (Fig. 4-11, Paragraph [0080]-[0081]).

Shimabara and Gia are analogous art because they are both related to a method of providing a travel route.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include the simulation route of Gia, with the method of a creating image of traveling path of Shimabara et al. because Gia teaches advantages of the Oct-tree terrain system that includes collision avoidance which could be easily implemented and performed in more efficient way (Paragraph [0081]).

13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of Pilley et al. (US Patent No. 5,867,804).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara teaches accepting a user-specified sequence of locations to be visited (Col. 8 lines 1-8).

Shimabara fails to teach calculating said simulation route by curve-fitting said specified sequence of locations.

Pilley et al. teaches calculating said simulation route by curve-fitting said specified sequence of locations (Col. 145 lines 55-67).

Shimabara and Pilley et al. are analogous art because they are both related to a method of three dimensional graphic display.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include curve-fitting of Pilley et al., with the method of a creating image of traveling path of Shimabara et al. because curve-fitting is a well known process in a method for smoothing transition between point for generating a travel path, and Pilley et al., teaches improved method of curve-fitting technique system that can be expanded to four dimensional capability (Col. 145 lines 48-67).

14. Claims 24, 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Shimabara (US Patent No. 6,360,168), in view of VISAGE (<http://www.maya.com/visage/link>, Information Appliances and Tools in Visage).

Shimabara teaches most all of the instant invention as applied to claims 1, 4, 6-10, 13, 15, 19, 23, 26, 29-31, 33, 35, and 36 above.

Shimabara teaches (Claim 24) displaying simulation information (Fig. 1).

Shimabara fails to teach (Claim 24) multiple users;

(Claim 25) facilitating said multiple users to interact with each other during said simulation;

(Claim 34) facilitating multiple users' interaction with each other during said simulation.

VISAGE (Claim 24) multiple users (Shared Frame);

(Claim 25) facilitating said multiple users to interact with each other during said simulation (Shared Frame, Polymorphic Shared Frame);

(Claim 34) facilitating multiple users' interaction with each other during said simulation (Shared Frame, Polymorphic Shared Frame).

Shimabara and VISAGE are analogous art because they are both related to visualization generation.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include user interaction of VISAGE, with the method of a creating image of traveling path of Shimabara et al. because user interaction is a well known process in a method for visualization generation, and VISAGE teaches advantages of the system that enables users to analyze data in ways that developers cannot anticipate (Information Appliances and Tools in Visage: Conclusion).

### ***Response to Arguments***

15. Applicant's arguments filed 12/27/2006 have been fully considered but they are not persuasive.

Applicant contends that Shimabara does not disclose obtaining information about a path traversed by a user, and the guiding route has not yet been traversed, so a path yet to be traversed by a driver is not the same as a path that has actually been traversed by a user. The examiner respectfully disagrees because the guiding route could be a path that has been already traversed

by a driver. In addition, the routing guiding route could be the same as a path that has been actually traversed by a driver. For instance, if a driver forgets a path that he/she has been traversed before, a driver can be obtaining information about a path traversed by getting a guiding route.

Applicant contends that Shimabara does not disclose enabling an interactive three-dimensional simulation as experienced from a moving vantage point. The examiner respectfully disagrees because transforming two-dimensional image objects to three-dimensional objects that undergoes a rotation coordinate-transform is corresponding to “enabling an interactive three-dimensional simulation”. Also, rotation coordinate-transformation in accordance with the traveling direction of the vehicle corresponds to “a moving vantage point”, so the three-dimensional image object as taught by Shimabara is an “interactive three-dimensional simulation as experienced from a moving vantage point.”

In response to applicant's argument that the references fail to show the vantage points along the simulation route can occur at any altitude (or succession of altitudes) and/or orientation with respect to the three-dimensional map, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

*Conclusion*

**16. THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**17.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eun H. Chung whose telephone number is 571-272-2164. The examiner can normally be reached on 7:30am-4:00pm Monday to Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EHC

  
PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100 2/21/07